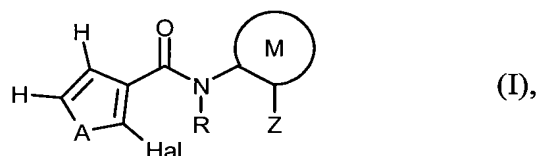


Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently amended) 2-Halofuryl/thienyl-3-carboxamides of the formula (I)



in which

A represents O (oxygen) or S (sulphur),

Hal represents halogen,

R represents hydrogen, C₁-C₈-alkyl, C₁-C₆-alkylsulphinyl, C₁-C₆-alkylsulphonyl, C₁-C₄-alkoxy-C₁-C₄-alkyl, C₃-C₈-cycloalkyl; C₁-C₆-haloalkyl, C₁-C₄-haloalkylthio, C₁-C₄-haloalkylsulphinyl, C₁-C₄-haloalkylsulphonyl, halo-C₁-C₄-alkoxy-C₁-C₄-alkyl, C₃-C₈-halocycloalkyl having in each case 1 to 9 fluorine, chlorine and/or bromine atoms; formyl, formyl-C₁-C₃-alkyl, (C₁-C₃-alkyl)carbonyl-C₁-C₃-alkyl, (C₁-C₃-alkoxy)carbonyl-C₁-C₃-alkyl; halo-(C₁-C₃-alkyl)carbonyl-C₁-C₃-alkyl, halo-(C₁-C₃-alkoxy)carbonyl-C₁-C₃-alkyl having in each case 1 to 13 fluorine, chlorine and/or bromine atoms; (C₁-C₈-alkyl)carbonyl, (C₁-C₈-alkoxy)carbonyl, (C₁-C₄-alkoxy-C₁-C₄-alkyl)carbonyl, (C₃-C₈-cycloalkyl)carbonyl; (C₁-C₆-haloalkyl)carbonyl, (C₁-C₆-haloalkoxy)carbonyl, (halo-C₁-C₄-alkoxy-C₁-C₄-alkyl)carbonyl, (C₃-C₈-halocycloalkyl)carbonyl having in each case 1 to 9 fluorine, chlorine and/or bromine atoms; or -C(=O)C(=O)R¹, -CONR²R³ or -CH₂NR⁴R⁵,

R¹ represents hydrogen, C₁-C₈-alkyl, C₁-C₈-alkoxy, C₁-C₄-alkoxy-C₁-C₄-alkyl, C₃-C₈-cycloalkyl; C₁-C₆-haloalkyl, C₁-C₆-haloalkoxy, halo-C₁-C₄-alkoxy-C₁-C₄-alkyl, C₃-C₈-halocycloalkyl having in each case 1 to 9 fluorine, chlorine and/or bromine atoms,

R² and R³ independently of one another each represent hydrogen, C₁-C₈-alkyl, C₁-C₄-alkoxy-C₁-C₄-alkyl, C₃-C₈-cycloalkyl; C₁-C₈-haloalkyl, halo-C₁-C₄-alkoxy-C₁-C₄-alkyl, C₃-C₈-halocycloalkyl having in each case 1 to 9 fluorine, chlorine and/or bromine atoms,

R² and R³ furthermore together with the nitrogen atom to which they are attached form a saturated heterocycle having 5 to 8 ring atoms which is optionally mono- or polysubstituted by identical or different substituents selected from the group consisting of halogen and C₁-C₄-alkyl, where the heterocycle optionally contains one or two further non-adjacent heteroatoms selected from the group consisting of oxygen, sulphur and NR⁶,

R⁴ and R⁵ independently of one another represent hydrogen, C₁-C₈-alkyl, C₃-C₈-cycloalkyl; C₁-C₈-haloalkyl, C₃-C₈-halocycloalkyl having in each case 1 to 9 fluorine, chlorine and/or bromine atoms,

R⁴ and R⁵ furthermore together with the nitrogen atom to which they are attached form a saturated heterocycle having 5 to 8 ring atoms which is optionally mono- or polysubstituted by identical or different substituents selected from the group consisting of halogen and C₁-C₄-alkyl, where the heterocycle optionally contains 1 or 2 further non-adjacent heteroatoms selected from the group consisting of oxygen, sulphur and NR⁶,

R⁶ represents hydrogen or C₁-C₆-alkyl,

M represents a phenyl which is monosubstituted by R⁷,

R^7 represents hydrogen, fluorine, chlorine, methyl, isopropyl, methylthio or trifluoromethyl,

Z represents Z^1 , Z^2 , Z^3 or Z^4 , in which

Z^1 represents phenyl which is optionally mono- to pentasubstituted by identical or different substituents W^1 ,

W^1 represents halogen, cyano, nitro, amino, hydroxyl, formyl, carboxy, carbamoyl, thiocarbamoyl;

in each case straight-chain or branched alkyl, hydroxyalkyl, oxoalkyl, alkoxy, alkoxyalkyl, alkylthioalkyl, dialkoxyalkyl, alkylthio, alkylsulphinyl or alkylsulphonyl having in each case 1 to 8 carbon atoms;

in each case straight-chain or branched alkenyl or alkenyloxy having in each case 2 to 6 carbon atoms;

in each case straight-chain or branched haloalkyl, haloalkoxy, haloalkylthio, haloalkylsulphinyl or haloalkylsulphonyl having in each case 1 to 6 carbon atoms and 1 to 13 identical or different halogen atoms;

in each case straight-chain or branched haloalkenyl or haloalkenyloxy having in each case 2 to 6 carbon atoms and 1 to 11 identical or different halogen atoms;

in each case straight-chain or branched alkylamino, dialkylamino, alkylcarbonyl, alkylcarbonyloxy, alkoxycarbonyl, alkylaminocarbonyl, dialkylaminocarbonyl, arylalkylaminocarbonyl, dialkylaminocarbonyloxy having 1 to 6 carbon atoms in the respective hydrocarbon chains, alkenylcarbonyl or alkynylcarbonyl having 2 to 6 carbon atoms in the respective hydrocarbon chains;

cycloalkyl or cycloalkyloxy having in each case 3 to 6 carbon atoms;

doubly attached alkylene having 3 or 4 carbon atoms, oxyalkylene having 2 or 3 carbon atoms ~~or dioxyalkylene having 1 or 2 carbon atoms~~, each of which is optionally mono- to tetrasubstituted by identical or different substituents selected from the group consisting of fluorine, chlorine, oxo, methyl, trifluoromethyl and ethyl;

~~or the grouping $C(Q^+)-N-Q^2$ in which~~

~~Q^+ represents hydrogen, hydroxyl or alkyl having 1 to 4 carbon atoms, haloalkyl having 1 to 4 carbon atoms and 1 to 9 fluorine, chlorine and/or bromine atoms or cycloalkyl having 1 to 6 carbon atoms and~~

~~Q^2 represents hydroxyl, amino, methylamino, phenyl, benzyl or represents in each case optionally cyano, hydroxyl, alkoxy, alkylthio, alkylamino, dialkylamino or phenyl-substituted alkyl or alkoxy having 1 to 4 carbon atoms, or represents alkenyloxy or alkynyloxy having in each case 2 to 4 carbon atoms,~~

~~and also phenyl, phenoxy, phenylthio, benzoyl, benzoylethenyl, cinnamoyl, heterocyclyl or phenylalkyl, phenylalkyloxy, phenylalkylthio or heterocyclylalkyl having in each case 1 to 3 carbon atoms in the respective alkyl moieties, each of which radicals is optionally mono- to trisubstituted in the cyclic moiety by halogen and/or straight chain or branched alkyl or alkoxy having 1 to 4 carbon atoms,~~

~~provided that when said Z^1 is phenyl that is mono-substituted by $CH=N-OCH_3$, said phenyl is further substituted by at least one halogen atom,~~

Z^2 represents bicycloalkyl or cycloalkyl which is optionally mono- or polysubstituted by identical or different substituents,

Z^3 represents unsubstituted C_2 - C_{20} -alkyl or represents C_1 - C_{20} -alkyl which is mono- or polysubstituted by identical or different substituents selected from the group consisting of halogen, alkylthio, alkylsulphinyl, alkylsulphonyl, alkoxy, alkylamino,

dialkylamino, haloalkylthio, haloalkylsulphinyl, haloalkylsulphonyl, haloalkoxy, haloalkylamino, halodialkylamino, $-\text{SiR}^8\text{R}^9\text{R}^{10}$ and $\text{C}_3\text{-C}_6\text{-cycloalkyl}$, where the cycloalkyl moiety is optionally mono- or polysubstituted by identical or different substituents selected from the group consisting of halogen and $\text{C}_1\text{-C}_4\text{-alkyl}$,

Z^4 represents $\text{C}_2\text{-C}_{20}\text{-alkenyl}$ or $\text{C}_2\text{-C}_{20}\text{-alkynyl}$, each of which is optionally mono- or polysubstituted by identical or different substituents selected from the group consisting of halogen, alkylthio, alkylsulphinyl, alkylsulphonyl, alkoxy, alkylamino, dialkylamino, haloalkylthio, haloalkylsulphinyl, haloalkylsulphonyl, haloalkoxy, haloalkylamino, halo-dialkylamino, $-\text{SiR}^8\text{R}^9\text{R}^{10}$ and $\text{C}_3\text{-C}_6\text{-cycloalkyl}$, where the cycloalkyl moiety is optionally mono- or polysubstituted by identical or different substituents selected from the group consisting of halogen and $\text{C}_1\text{-C}_4\text{-alkyl}$,

R^8 and R^9 independently of one another represent hydrogen, $\text{C}_1\text{-C}_8\text{-alkyl}$, $\text{C}_1\text{-C}_8\text{-alkoxy}$, $\text{C}_1\text{-C}_4\text{-alkoxy-C}_1\text{-C}_4\text{-alkyl}$, $\text{C}_1\text{-C}_4\text{-alkylthio-C}_1\text{-C}_4\text{-alkyl}$ or $\text{C}_1\text{-C}_6\text{-haloalkyl}$,

R^{10} represents hydrogen, $\text{C}_1\text{-C}_8\text{-alkyl}$, $\text{C}_1\text{-C}_8\text{-alkoxy}$, $\text{C}_1\text{-C}_4\text{-alkoxy-C}_1\text{-C}_4\text{-alkyl}$, $\text{C}_1\text{-C}_4\text{-alkylthio-C}_1\text{-C}_4\text{-alkyl}$, $\text{C}_2\text{-C}_8\text{-alkenyl}$, $\text{C}_2\text{-C}_8\text{-alkynyl}$, $\text{C}_1\text{-C}_6\text{-haloalkyl}$, $\text{C}_2\text{-C}_6\text{-haloalkenyl}$, $\text{C}_2\text{-C}_6\text{-haloalkynyl}$, $\text{C}_3\text{-C}_6\text{-cycloalkyl}$, or represents in each case optionally substituted phenyl or phenylalkyl.

2. (Currently amended) 2-Halofuryl/thienyl-3-carboxamides of the formula (I) according to Claim 1 in which

A represents O (oxygen) or S (sulphur),

Hal represents fluorine, chlorine, bromine or iodine,

R represents hydrogen, $\text{C}_1\text{-C}_6\text{-alkyl}$, $\text{C}_1\text{-C}_4\text{-alkylsulphinyl}$, $\text{C}_1\text{-C}_4\text{-alkylsulphonyl}$, $\text{C}_1\text{-C}_3\text{-alkoxy-C}_1\text{-C}_3\text{-alkyl}$, $\text{C}_3\text{-C}_6\text{-cycloalkyl}$; $\text{C}_1\text{-C}_4\text{-haloalkyl}$, $\text{C}_1\text{-C}_4\text{-}$

haloalkylthio, C₁-C₄-haloalkylsulphinyl, C₁-C₄-haloalkylsulphonyl, halo-C₁-C₃-alkoxy-C₁-C₃-alkyl, C₃-C₈-halocycloalkyl having in each case 1 to 9 fluorine, chlorine and/or bromine atoms; formyl, formyl-C₁-C₃-alkyl, (C₁-C₃-alkyl)carbonyl-C₁-C₃-alkyl, (C₁-C₃-alkoxy)carbonyl-C₁-C₃-alkyl; halo-(C₁-C₃-alkyl)carbonyl-C₁-C₃-alkyl, halo-(C₁-C₃-alkoxy)carbonyl-C₁-C₃-alkyl having in each case 1 to 13 fluorine, chlorine and/or bromine atoms; (C₁-C₆-alkyl)carbonyl, (C₁-C₄-alkoxy)carbonyl, (C₁-C₃-alkoxy-C₁-C₃-alkyl)carbonyl, (C₃-C₆-cycloalkyl)carbonyl; (C₁-C₄-haloalkyl)carbonyl, (C₁-C₄-haloalkoxy)carbonyl, (halo-C₁-C₃-alkoxy-C₁-C₃-alkyl)carbonyl, (C₃-C₆-halocycloalkyl)carbonyl having in each case 1 to 9 fluorine, chlorine and/or bromine atoms, or -C(=O)C(=O)R¹, -CONR²R³ or -CH₂NR⁴R⁵,

R¹ represents hydrogen, C₁-C₆-alkyl, C₁-C₄-alkoxy, C₁-C₃-alkoxy-C₁-C₃-alkyl, C₃-C₆-cycloalkyl; C₁-C₄-haloalkyl, C₁-C₄-haloalkoxy, halo-C₁-C₃-alkoxy-C₁-C₃-alkyl, C₃-C₆-halocycloalkyl having in each case 1 to 9 fluorine, chlorine and/or bromine atoms,

R² and R³ independently of one another each represent hydrogen, C₁-C₆-alkyl, C₁-C₃-alkoxy-C₁-C₃-alkyl, C₃-C₆-cycloalkyl; C₁-C₄-haloalkyl, halo-C₁-C₃-alkoxy-C₁-C₃-alkyl, C₃-C₆-halocycloalkyl having in each case 1 to 9 fluorine, chlorine and/or bromine atoms,

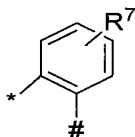
R² and R³ furthermore together with the nitrogen atom to which they are attached form a saturated heterocycle having 5 or 6 ring atoms which is optionally mono- to tetrasubstituted by identical or different substituents selected from the group consisting of halogen and C₁-C₄-alkyl, where the heterocycle optionally contains 1 or 2 further non-adjacent heteroatoms selected from the group consisting of oxygen, sulphur and NR⁶,

R^4 and R^5 independently of one another represent hydrogen, C_1 - C_6 -alkyl, C_3 - C_6 -cycloalkyl; C_1 - C_4 -haloalkyl, C_3 - C_6 -halocycloalkyl having in each case 1 to 9 fluorine, chlorine and/or bromine atoms,

R^4 and R^5 furthermore together with the nitrogen atom to which they are attached form a saturated heterocycle having 5 or 6 ring atoms which is optionally mono- or polysubstituted by identical or different substituents selected from the group consisting of halogen and C_1 - C_4 -alkyl, where the heterocycle optionally contains 1 or 2 further non-adjacent heteroatoms selected from the group consisting of oxygen, sulphur and NR^6 ,

R^6 represents hydrogen or C_1 - C_4 -alkyl,

M represents



where the bond marked “*” is attached to the amide and the bond marked “#” is attached to the radical Z,

R^7 represents hydrogen, fluorine, chlorine, methyl, isopropyl, methylthio or trifluoromethyl,

Z represents Z^1 , Z^2 , Z^3 or Z^4 , where

Z^1 represents phenyl which is optionally mono- to pentasubstituted by identical or different substituents W^1 ,

W^1 represents halogen, cyano, nitro, amino, hydroxyl, formyl, carboxy, carbamoyl, thiocarbamoyl;

in each case straight-chain or branched alkyl, hydroxyalkyl, oxoalkyl, alkoxy, alkoxyalkyl, alkylthioalkyl, dialkoxyalkyl, alkylthio, alkylsulphinyl or alkylsulphonyl having in each case 1 to 8 carbon atoms;

in each case straight-chain or branched alkenyl or alkenyloxy having in each case 2 to 6 carbon atoms;

in each case straight-chain or branched haloalkyl, haloalkoxy, haloalkylthio, haloalkylsulphinyl or haloalkylsulphonyl having in each case 1 to 6 carbon atoms and 1 to 13 identical or different halogen atoms;

in each case straight-chain or branched haloalkenyl or haloalkenyloxy having in each case 2 to 6 carbon atoms and 1 to 11 identical or different halogen atoms;

in each case straight-chain or branched alkylamino, dialkylamino, alkylcarbonyl, alkylcarbonyloxy, alkoxycarbonyl, alkylaminocarbonyl, dialkylaminocarbonyl, arylalkylaminocarbonyl, dialkylaminocarbonyloxy having 1 to 6 carbon atoms in the respective hydrocarbon chains, alkenylcarbonyl or alkynylcarbonyl having 2 to 6 carbon atoms in the respective hydrocarbon chains;

cycloalkyl or cycloalkyloxy having in each case 3 to 6 carbon atoms;

doubly attached alkylene having 3 or 4 carbon atoms, oxyalkylene having 2 or 3 carbon atoms ~~or dioxyalkylene having 1 or 2 carbon atoms~~, each of which is optionally mono- to tetrasubstituted by identical or different substituents selected from the group consisting of fluorine, chlorine, oxo, methyl, trifluoromethyl and ethyl;

~~or the grouping $C(Q^+)=N-Q^2$ in which~~

~~Q^+ represents hydrogen, hydroxyl or alkyl having 1 to 4 carbon atoms, haloalkyl having 1 to 4 carbon atoms and 1 to 9 fluorine, chlorine and/or bromine atoms or cycloalkyl having 1 to 6 carbon atoms and~~

Q^2 ~~represents hydroxyl, amino, methylamino, phenyl, benzyl or represents in each case optionally cyano-, hydroxyl-, alkoxy-, alkylthio-, alkylamino-, dialkylamino- or phenyl-substituted alkyl or alkoxy having 1 to 4 carbon atoms, or represents alkenyloxy or alkynyloxy having in each case 2 to 4 carbon atoms;~~

~~and also phenyl-, phenoxy-, phenylthio-, benzoyl-, benzoyl-ethenyl-, cinnamoyl-, heterocyclyl or phenylalkyl-, phenylalkyloxy-, phenylalkylthio- or heterocyclylalkyl having in each case 1 to 3 carbon atoms in the respective alkyl moieties, each of which radicals is optionally mono- to trisubstituted in the cyclic moiety by halogen and/or straight chain or branched alkyl or alkoxy having 1 to 4 carbon atoms;~~

Z^2 represents cycloalkyl or bicycloalkyl having in each case 3 to 10 carbon atoms and being in each case optionally mono- to tetrasubstituted by identical or different substituents selected from the group consisting of halogen and/or C₁-C₄-alkyl,

Z^3 represents unsubstituted C₂-C₂₀-alkyl or C₁-C₂₀-alkyl which is mono- or polysubstituted by identical or different substituents from the group consisting of fluorine, chlorine, bromine, iodine, C₁-C₆-alkylthio, C₁-C₆-alkylsulphinyl, C₁-C₆-alkylsulphonyl, C₁-C₆-alkoxy, C₁-C₆-alkylamino, di(C₁-C₆-alkyl)amino, C₁-C₆-haloalkylthio, C₁-C₆-haloalkylsulphinyl, C₁-C₆-haloalkylsulphonyl, C₁-C₆-haloalkoxy, C₁-C₆-haloalkylamino, halo-di(C₁-C₆-alkyl)amino, -SiR⁸R⁹R¹⁰ and C₃-C₆-cycloalkyl, where the cycloalkyl moiety ~~for its part~~ is optionally ~~be~~ mono- to tetrasubstituted by identical or different substituents selected from the group consisting of fluorine, chlorine, bromine, iodine, C₁-C₄-alkyl and C₁-C₄-haloalkyl,

Z^4 represents C₂-C₂₀-alkenyl or C₂-C₂₀-alkynyl, each of which is optionally mono- or polysubstituted by identical or different substituents selected from the group consisting of fluorine, chlorine, bromine, iodine, C₁-C₆-alkylthio, C₁-C₆-alkylsulphinyl,

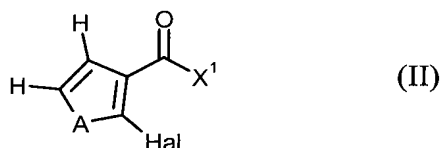
C₁-C₆-alkylsulphonyl, C₁-C₆-alkoxy, C₁-C₆-alkylamino, di(C₁-C₆-alkyl)amino, C₁-C₆-haloalkylthio, C₁-C₆-haloalkylsulphinyl, C₁-C₆-haloalkylsulphonyl, C₁-C₆-haloalkoxy, C₁-C₆-haloalkylamino, halo-di(C₁-C₆-alkyl)amino, -SiR⁸R⁹R¹⁰ and C₃-C₆-cycloalkyl, where the cycloalkyl moiety for its part optionally be mono- to tetrasubstituted by identical or different substituents from the group consisting of fluorine, chlorine, bromine, iodine, C₁-C₄-alkyl and C₁-C₄-haloalkyl,

R⁸ and R⁹ independently of one another represent C₁-C₆-alkyl, C₁-C₆-alkoxy, C₁-C₃-alkoxy-C₁-C₃-alkyl or C₁-C₃-alkylthio-C₁-C₃-alkyl,

R¹⁰ represents C₁-C₆-alkyl, C₁-C₆-alkoxy, C₁-C₃-alkoxy-C₁-C₃-alkyl, C₁-C₃-alkylthio-C₁-C₃-alkyl, C₃-C₆-cycloalkyl, phenyl or benzyl.

3. (Withdrawn) Process for preparing the 2-halofuryl/thienyl-3-carboxamides of the formula (I) according to Claim 1, characterized in that

a) carboxylic acid derivatives of the formula (II)

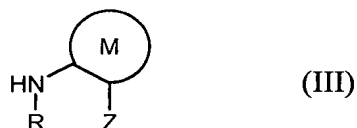


in which

A and Hal are as defined in Claim 1 and

X¹ represents halogen or hydroxyl

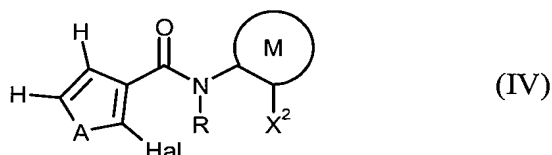
are reacted with aniline derivatives of the formula (III)



in which R, M and Z are as defined in Claim 1,

if appropriate in the presence of a catalyst, if appropriate in the presence of a condensing agent, if appropriate in the presence of an acid binder and if appropriate in the presence of a diluent, or

b) halocarboxamides of the formula (IV)

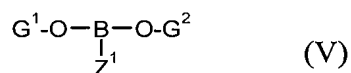


in which

A, Hal, R and M are as defined in Claim 1,

X² represents bromine, iodine or trifluoromethylsulphonate,

are reacted with boronic acid derivatives of the formula (V)



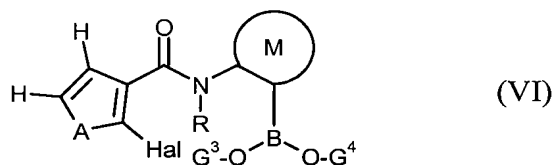
in which

Z¹ is as defined in Claim 1 and

G¹ and G² each represent hydrogen or together represent tetramethylethylene,

in the presence of a catalyst, if appropriate in the presence of an acid binder and if appropriate in the presence of a diluent, or

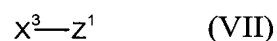
c) boronic acid derivatives of the formula (VI)



in which

A, Hal, R and M are as defined in Claim 1,

G³ and G⁴ each represent hydrogen or together represent tetramethylethylene
are reacted with phenyl derivatives of the formula (VII)



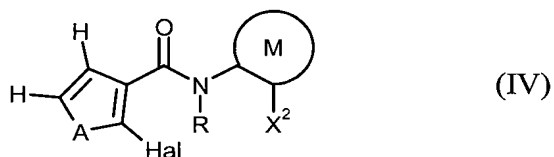
in which

Z¹ is as defined in Claim 1 and

X³ represents chlorine, bromine, iodine or trifluoromethylsulphonate,

if appropriate in the presence of a catalyst, if appropriate in the presence of an
acid binder and if appropriate in the presence of a diluent, or

d) halocarboxamides of the formula (IV)

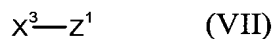


in which

A, Hal, R and M are as defined in Claim 1,

X² represents bromine, iodine or trifluoromethylsulphonate,

are reacted with phenyl derivatives of the formula (VII)



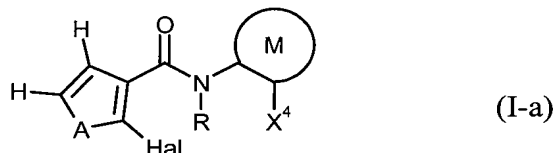
in which

Z¹ is as defined in Claim 1 and

X³ represents chlorine, bromine, iodine or trifluoromethylsulphonate,

in the presence of a palladium or nickel catalyst and in the presence of 4,4,4',4',5,5,5',5'-octamethyl-2,2'-bis-1,3,2-dioxaborolane, if appropriate in the presence of an acid binder and if appropriate in the presence of a diluent, or

e) 2-halofuryl/thienyl-3-carboxamides of the formula (I-a)



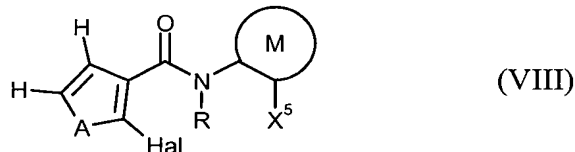
in which

A, Hal, R and M are as defined in Claim 1,

X^4 represents C_2 - C_{20} -alkenyl or C_2 - C_{20} -alkynyl which are in each case optionally mono- or polysubstituted by identical or different substituents from the group consisting of halogen, alkylthio, alkylsulphinyl, alkylsulphonyl, alkoxy, alkylamino, dialkylamino, haloalkylthio, haloalkylsulphinyl, haloalkylsulphonyl, haloalkoxy, haloalkylamino, halodialkylamino, $-SiR^8R^9R^{10}$ and C_3 - C_6 -cycloalkyl, where the cycloalkyl moiety for its part may optionally be substituted by halogen and/or C_1 - C_4 alkyl,

are hydrogenated, if appropriate in the presence of a diluent and if appropriate in the presence of a catalyst, or

f) hydroxyalkylcarboxamides of the formula (VIII)



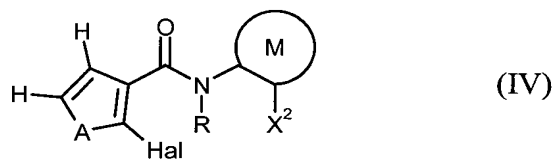
in which

A, Hal, R and M are as defined in Claim 1,

X⁵ represents C₂-C₂₀-hydroxyalkyl which is optionally additionally mono- or polysubstituted by identical or different substituents from the group consisting of halogen, alkylthio, alkylsulphinyl, alkylsulphonyl, alkoxy, alkylamino, dialkylamino, haloalkylthio, haloalkylsulphinyl, haloalkylsulphonyl, haloalkoxy, haloalkylamino, halodialkylamino, -SiR⁸R⁹R¹⁰ and C₃-C₆-cycloalkyl, where the cycloalkyl moiety for its part may optionally be substituted by halogen and/or C₁-C₄-alkyl,

are dehydrated, if appropriate in the presence of a diluent and if appropriate in the presence of an acid, or

g) halocarboxamides of the formula(IV)



in which

A, Hal, R and M are as defined in Claim 1,

X² represents bromine, iodine or trifluoromethylsulphonate,

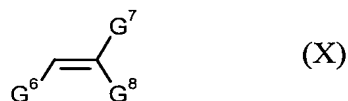
are reacted with an alkyne of the formula (IX)



in which

G⁵ represents C₂-C₁₈-alkyl which is optionally mono- or polysubstituted by identical or different substituents from the group consisting of halogen, alkylthio, alkylsulphinyl, alkylsulphonyl, alkoxy, alkylamino, dialkylamino, haloalkylthio, haloalkylsulphinyl, haloalkylsulphonyl, haloalkoxy, haloalkylamino, halodialkylamino, -SiR⁸R⁹R¹⁰ and C₃-C₆-cycloalkyl, where the cycloalkyl moiety for its part may optionally be substituted by halogen and/or C₁-C₄-alkyl,

or an alkene of the formula (X)

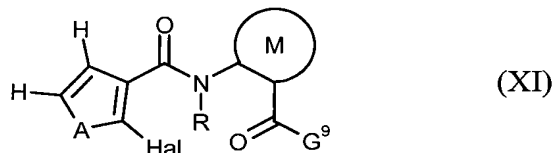


in which

G⁶, G⁷ and G⁸ independently of one another each represent hydrogen or alkyl which is optionally mono- or polysubstituted by identical or different substituents from the group consisting of halogen, alkylthio, alkylsulphinyl, alkylsulphonyl, alkoxy, alkylamino, dialkylamino, haloalkylthio, haloalkylsulphinyl, haloalkylsulphonyl, haloalkoxy, haloalkylamino, halodialkylamino, -SiR⁸R⁹R¹⁰ and C₃-C₆-cycloalkyl, where the cycloalkyl moiety for its part may optionally be substituted by halogen and/or C₁-C₄-alkyl and the total number of carbon atoms of the open-chain molecular moiety (without substituents) does not exceed the number 20,

if appropriate in the presence of a diluent, if appropriate in the presence of an acid binder and if appropriate in the presence of one or more catalysts, or

h) ketones of the formula (XI)



in which

A, Hal, R and M are as defined in Claim 1,

G⁹ represents hydrogen or C₁-C₁₈-alkyl which is optionally mono- or polysubstituted by identical or different substituents from the group consisting of halogen, alkylthio, alkylsulphinyl, alkylsulphonyl, alkoxy, alkylamino, dialkylamino, haloalkylthio, haloalkylsulphinyl, haloalkylsulphonyl, haloalkoxy, haloalkylamino,

halodialkylamino, $-\text{SiR}^8\text{R}^9\text{R}^{10}$ and $\text{C}_3\text{-C}_6\text{-cycloalkyl}$, where the cycloalkyl moiety for its part may optionally be substituted by halogen and/or $\text{C}_1\text{-C}_4\text{-alkyl}$,

are reacted with a phosphorus compound of the general formula (XII)



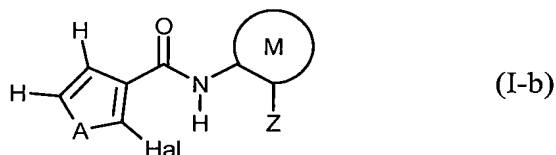
in which

G^{10} represents $\text{C}_1\text{-C}_{18}\text{-alkyl}$ which is optionally mono- or polysubstituted by identical or different substituents from the group consisting of halogen, alkylthio, alkylsulphinyl, alkylsulphonyl, alkoxy, alkylamino, dialkylamino, haloalkylthio, haloalkylsulphinyl, haloalkylsulphonyl, haloalkoxy, haloalkylamino, halodialkylamino, $-\text{SiR}^8\text{R}^9\text{R}^{10}$ and $\text{C}_3\text{-C}_6\text{-cycloalkyl}$, where the cycloalkyl moiety for its part may optionally be substituted by halogen and/or $\text{C}_1\text{-C}_4\text{-alkyl}$,

P_x represents a grouping $-\text{P}^+(\text{C}_6\text{H}_5)_3\text{Cl}^-$, $-\text{P}^+(\text{C}_6\text{H}_5)_3\text{Br}^-$, $-\text{P}^+(\text{C}_6\text{H}_5)_3\text{I}^-$, $-\text{P}(=\text{O})(\text{OCH}_3)_3$ or $-\text{P}(=\text{O})(\text{OC}_2\text{H}_5)_3$,

if appropriate in the presence of a diluent, or

i) 2-halofuryl/thienyl-3-carboxamides of the formula (I-b)



in which

A, Hal, R, M and Z are as defined in Claim 1

are reacted with halides of the formula (XIII)



in which

R^a represents C_1 - C_8 -alkyl, C_1 - C_6 -alkylsulphinyl, C_1 - C_6 -alkylsulphonyl, C_1 - C_4 -alkoxy- C_1 - C_4 -alkyl, C_3 - C_8 -cycloalkyl; C_1 - C_6 -haloalkyl, C_1 - C_4 -haloalkylthio, C_1 - C_4 -haloalkylsulphinyl, C_1 - C_4 -haloalkylsulphonyl, halo- C_1 - C_4 -alkoxy- C_1 - C_4 -alkyl, C_3 - C_8 -halocycloalkyl having in each case 1 to 9 fluorine, chlorine and/or bromine atoms; formyl, formyl- C_1 - C_3 -alkyl, (C_1 - C_3 -alkyl)carbonyl- C_1 - C_3 -alkyl, (C_1 - C_3 -alkoxy)carbonyl- C_1 - C_3 -alkyl; halo-(C_1 - C_3 -alkyl)carbonyl- C_1 - C_3 -alkyl, halo-(C_1 - C_3 -alkoxy)carbonyl- C_1 - C_3 -alkyl having in each case 1 to 13 fluorine, chlorine and/or bromine atoms; (C_1 - C_8 -alkyl)carbonyl, (C_1 - C_8 -alkoxy)carbonyl, (C_1 - C_4 -alkoxy- C_1 - C_4 -alkyl)carbonyl, (C_3 - C_8 -cycloalkyl)carbonyl; (C_1 - C_6 -haloalkyl)carbonyl, (C_1 - C_6 -haloalkoxy)carbonyl, (halo- C_1 - C_4 -alkoxy- C_1 - C_4 -alkyl)carbonyl, (C_3 - C_8 -halocycloalkyl)carbonyl having in each case 1 to 9 fluorine, chlorine and/or bromine atoms; or $-C(=O)C(=O)R^1$, $-CONR^2R^3$ or $-CH_2NR^4R^5$,

R^1 , R^2 , R^3 , R^4 and R^5 are as defined above,

X^6 represents chlorine, bromine or iodine,

in the presence of a base and in the presence of a diluent.

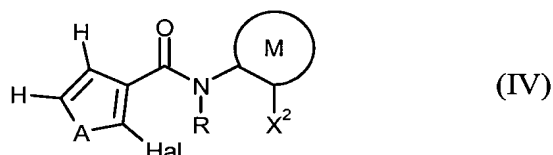
4. (Previously presented) A composition for controlling unwanted microorganisms, comprising at least one 2-halofuryl/thienyl-3-carboxamide of the formula (I) according to Claim 1, and one or more extenders and/or surfactants.

5. (Withdrawn) Use of 2-halofuryl/thienyl-3-carboxamides of the formula (I) according to Claim 1 for controlling unwanted microorganisms.

6. (Withdrawn) Method for controlling unwanted microorganisms, characterized in that 2-halofuryl/thienyl-3-carboxamides of the formula (I) according to Claim 1 are applied to the microorganisms and/or their habitat.

7. (Withdrawn) Process for preparing compositions for controlling unwanted microorganisms, characterized in that 2-halofuryl/thienyl-3-carboxamides of the formula (I) according to Claim 1 are mixed with extenders and/or surfactants.

8. (Withdrawn) Halocarboxamides of the formula (IV)

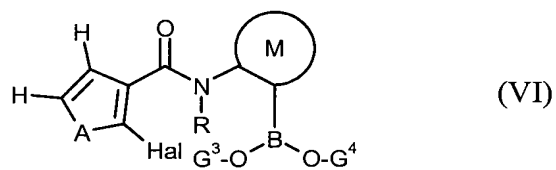


in which

A, Hal, R and M are as defined in Claim 1,

X² represents bromine or iodine.

9. (Withdrawn) Boronic acid derivatives of the formula (VI)

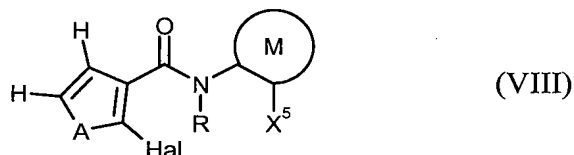


in which

A, Hal, R and M are as defined in Claim 1,

G³ and G⁴ each represent hydrogen or together represent tetramethylethylene.

10. (Withdrawn) Hydroxyalkylcarboxamides of the formula (VIII)

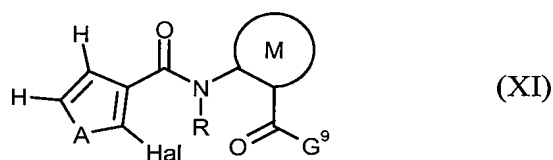


in which

A, Hal, R and M are as defined in Claim 1,

X⁵ represents C₂-C₂₀-hydroxyalkyl which is optionally additionally mono- or polysubstituted by identical or different substituents from the group consisting of halogen, alkylthio, alkylsulphinyl, alkylsulphonyl, alkoxy, alkylamino, dialkylamino, haloalkylthio, haloalkylsulphinyl, haloalkylsulphonyl, haloalkoxy, haloalkylamino, halodialkylamino, -SiR⁸R⁹R¹⁰ and/or C₃-C₆-cycloalkyl, where the cycloalkyl moiety for its part may optionally be substituted by halogen and/or C₁-C₄-alkyl.

11. (Withdrawn) Ketones of the formula (XI)



in which

A, Hal, R and M are as defined in Claim 1,

G⁹ represents hydrogen or represents C₁-C₁₈-alkyl which is optionally mono- or polysubstituted by identical or different substituents from the group consisting of halogen, alkylthio, alkylsulphinyl, alkylsulphonyl, alkoxy, alkylamino, dialkylamino, haloalkylthio, haloalkylsulphinyl, haloalkylsulphonyl, haloalkoxy, haloalkylamino, halodialkylamino, -SiR⁸R⁹R¹⁰ and C₃-C₆-cycloalkyl, where the cycloalkyl moiety for its part may optionally be substituted by halogen and/or C₁-C₄-alkyl.

12. (New) 2-Halofuryl/thienyl-3-carboxamides of the formula (I) according to Claim 1, in which

R represents hydrogen, and

Z represents Z¹.

13. (New) 2-Halofuryl/thienyl-3-carboxamides of the formula (I) according to Claim 1, in which

R represents hydrogen, and

Z represents Z³.

14. (New) 2-Halofuryl/thienyl-3-carboxamides of the formula (I) according to Claim 1, in which

R represents hydrogen, and

Z represents Z⁴.

15. (New) 2-Halofuryl/thienyl-3-carboxamides of the formula (I) according to Claim 1, in which

R represents hydrogen,

R⁷ represents hydrogen or fluorine, and

Z represents Z³.

16. (New) 2-Halofuryl/thienyl-3-carboxamides of the formula (I) according to Claim 15, in which

Z³ represents unsubstituted C₂-C₂₀-alkyl.

17. (New) N-[2-(1,3-dimethylbutyl)phenyl]-2-iodothiophene-3-carboxamide:

